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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,125	04/05/2000	Brett T. Hannigan	60154	7024
23735	7590	07/01/2005	EXAMINER	
DIGIMARC CORPORATION			HESS, DANIEL A	
9405 SW GEMINI DRIVE			ART UNIT	
BEAVERTON, OR 97008			PAPER NUMBER	
			2876	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/543,125

Applicant(s)

HANNIGAN, BRETT T.

Examiner

Daniel A. Hess

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-10 and 13-34 is/are pending in the application.
- 4a) Of the above claim(s) 25-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-7, 10, 13-21 and 23 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Remarks

The examiner realizes that prosecution in the instant case has been somewhat longer than may be typical. The examiner realizes this may be somewhat frustrating to the applicant especially because the examiner did made new grounds of rejection after withdrawing earlier arguments. The examiner appreciates the applicant's patience in this matter.

Due to the a change in the examiner's position, this action is being made non-final.

Response to Arguments

Applicant's arguments filed 3/19/2004 have been fully considered but they are not persuasive. The examiner notes that due to a back-and-forth exchange on restrictions, these arguments have not yet been addressed.

The crux of the argument made appears to be summed up in the following paragraph on page 9 of the 3/19/2004 arguments:

The rejection of claim 13 is similarly traversed. Although the preamble sets forth a known scanner, there is no teaching or suggestion in the art that would have led an artisan to modify programming for the scanner's internal CPU to effect the methodology detailed in the remainder of the claim. Rather, the art would lead such an artisan to pass the scanner data to a computer for watermark processing.

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The applicant argues that an artisan would not have been led to take a known scanner and open it up to alter its internal programming, when it would be easier to just pass the scanner data to a computer.

The examiner disagrees with the applicant's logic and makes the following two observations:

(1) It may well be the case that the artisans in question are the engineers of the HP CapShare 920 themselves. This is not unusual at all because typically a company improves its own line of products year after year. For such artisans, modifying the software internal to the scanner could indeed be the easiest and most natural thing to do. No complicated reverse engineering would be needed, because those engineers would already have full access to and knowledge of the scanner's inner workings and programming.

(2) The preamble establishes that an artisan would have had the ability to make the scanner recited in the preamble; thus such an artisan would be able to modify the inner software, because that is all part of what was known.

The applicant cannot convincingly argue that the HP CapShare would be treated as a kind of 'black box' whose data is more easily passed to a computer for processing and also admit that the so-called 'black box' is known (and thus not really a black box), as he has done by arranging the claim in Jepson form.

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The examiner further notes that scanners not infrequently have an internal decoding system. For example, the examiner has with his computer a barcode scanning peripheral device (actually a relic from the days of paper cases) that sends a decoded signal to the computer, without the computer needing decoding software.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3-7, 10 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Kurowski (US 6,553,127).

Re claims 3, 4, 10: In this Jepson-style claim, all that precedes the phrase 'the improvement comprising' is considered to be known.

Kurowski teaches (see entire document) watermark detection.

In view of Kurowski's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known watermark detection application for the admitted prior art scanner because Kurowski does not teach how the

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data stream he recites is acquired, and clearly, therefore a method of acquiring that data stream is needed.

Re claim 5: A 'calibration' signal could be anything used to mark an area where a watermark might be, including the 'selected characteristics' referred to throughout Kurowski, column 3.

Re claim 6, 13, 19: Kurowski teaches (column 3, lines 13-20) a two-technique process. The first technique can involve testing blocks on some criterion to see if they pass a preselection process. The second technique involves processing those candidates. Processing can be (column 3, lines 40-45) detecting the watermark (i.e. attempt to read / decode).

Kurowski fails to show which piece of scanning hardware is employed in the above scanning process. The applicant's admitted hardware device could be this piece of hardware.

In view of Kurowski's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known admitted prior art scanner for the process of Kurowski because a source capable of gathering 2-D images is needed to provide Kurowski's image data stream.

Re claim 7, 18: The criteria indicating improved odds of a watermark detection can include texture information (column 11, lines 55-65 of Kurowski).

Re claim 14: A 'calibration' signal could be anything used to mark an area where a watermark might be, including the 'selected characteristics' referred to throughout Kurowski, column 3.

Re claim 15: The criteria indicating improved odds of a watermark can include frequency information (column 11, lines 55-65 of Kurowski).

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Re claim 16: See discussion re claim 13 above. The 'attribute information' referred to in this claim is another word for 'selected characteristics' referred to throughout column 3 of Kurowski.

Re claim 17: The criteria indicating improved odds of a watermark can include frequency information (column 11, lines 55-65 of Kurowski).

Re claim 20: Kurowski specifically aims to avoid 'brute force' processing of prior art systems. Thus, one can infer that higher rates of sampling are intended only for those blocks that are selected as described above and throughout Kurowski.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh et al. (US 5,206,491).

The portion of the claim recited in the preamble describes components common generally to scanners. As Katoh shows (figures 2a and 2b) there are two spaced apart sensors employing different views to improving reading (decoding) of the data.

Katoh fails to show that the sensors are multi-element.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known multielement sensing system for a single sensor in Katoh to handle cases of 2D codes to be read.

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Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh as modified by the known art of multi-element sensing systems as applied to claim 21 above, in view of the applicant's prior art admissions.

Katoh fails to teach watermark detecting.

The applicant admits watermark systems in need of decoding.

In view of the need shown by the applicant, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a two-view scanner to decode watermarks, because, as with any optically readable code, two views increase the odds that the code will be in range of at least one scanner.

Allowable Subject Matter

Claims 8, 9, 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Assesses relative distances and applying compensations as additional purposes for the recited spaced-apart 2-D sensor arrays in the context of the various limitations upon which the claims depend is neither taught nor suggested in the prior art of record.

The examiner adds that allowances are subject to additional review prior to issue and as a result, indications of allowable subject matter cannot be binding prior to issue.

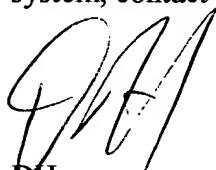
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DH

6/15/05

**DANIEL STCYR
PRIMARY EXAMINER**

